# 2011 Procedures Adult Criteria

## Polysomnogram (PSG) (Custom) - UDOH[1, 2, 3, 4, 5, 6, 7]

Created based on InterQual Subset: Polysomnogram (PSG)

Version: InterQual® 2009

| | | | | |
|---|---|---|---|---|
| CLIENT: | Name | D.O.B. | ID# | GROUP# |
| CPT/ICD9: | Code | Facility | Service Date | |
| PROVIDER: | Name | | ID# | Phone# |
| | Signature | | Date | |

**ICD-9-CM:** 89.17

INDICATIONS (choose one and see below)

☐ 100 Repeat Study for continued symptoms in treated sleep apnea patient
☐ 200 Repeat study in post-surgical patients (ie tonsillectomy, rhinoplasty, UPPP, LAUP)
☐ Indication Not Listed (Provide clinical justification below)

☐ 100 Repeat Study for continued symptoms in treated sleep apnea patient **[One]**[8, 9, 10, 11]
- ☐ 110 Documentation showing continued symptoms after 3 months compliance with prescribed treatment[12]
- ☐ 120 Documentation from provider stating that current treatment is contraindicated
- ☐ 130 Documentation from provider showing significant weight change ( ≥10%)[13]

☐ 200 Repeat study in post-surgical patients (ie tonsillectomy, rhinoplasty, UPPP, LAUP)[14, 15, 16, 17]

### Notes

**(1)**
These criteria include the following procedure:
Sleep Study

**(2)-POL:**
Utah Medicaid will reimburse for 1-PSG 95810 and 1-PSG 95811 per calendar year without prior authorization. Requests that exceed the limit of (1) code per year require prior authorization and must meet UDOH criteria

**(3)**
Polysomnogram (PSG) is a sleep study used to diagnose specific sleep disorders, primarily obstructive sleep apnea (OSA). The parameters typically monitored include brain wave activity, eye movements, REM sleep, limb movement, heart rate and rhythm, airflow through the nose and mouth, chest wall excursion, oxygen saturation, snoring loudness, and sleep position.

**(4)**
A standard PSG study gathers diagnostic data and titrates CPAP in a laboratory setting over a 2-night period. A split-night sleep study is a variation of the standard PSG in which the diagnostic PSG and CPAP titration are completed in one night. A split-night study is likely to be more accurate for patients with a high pretest probability for OSA (Patel et al., Chest 2007; 132(5): 1664-1671; Kushida et al., Sleep 2005; 28(4): 499-521)

**(5)**

In addition to a facility-based PSG, portable monitoring devices are also being used in the home to diagnose OSA. Although results may be less accurate, a home study may be acceptable based on the patient's clinical presentation and the medical practitioner's judgment. A home study may be appropriate for patients with a high pretest probability of OSA or for patients that are unable to have the study performed in the sleep laboratory (e.g., severe obesity, nonambulatory). The home study may also be used to monitor a patient's response to non-CPAP treatments, such as oral appliances or upper airway surgery (Ahmed et al., Chest 2007; 132(5): 1672-1677; Collop et al., J Clin Sleep Med 2007; 3(7): 737-747; Kushida et al., Sleep 2005; 28(4): 499-521).

**(6)**

Patients who choose not to adhere to therapy for their sleep apnea may do so because they find it cumbersome and uncomfortable. Surgery may be rejected as an option to correct the problem or they may not be surgical candidates because of comorbid medical conditions (Guilleminault and Abad, Med Clin North Am 2004; 88(3): 611-630, viii).

**(7)**

Repeat PSG is warranted only when test results will impact patient treatment.

**(8)**

These criteria are based primarily on symptoms reported by the patient or their significant other. Certain upper airway abnormalities such as tonsillar hypertrophy, an enlarged soft palate, a narrow oropharynx, nasal polyps, septal deviation, retrognathia, or an increased neck size found on PE support the diagnosis of sleep apnea.

**(9)**

PSG is used to evaluate the efficacy of a therapeutic intervention. The timing of this follow-up PSG is a matter of clinical judgment.

**(10)**

CPAP and BiPAP are both effective means of treating OSA. Positive pressure serves to splint the pharyngeal airway and prevent occlusion which can cause the apneic episodes. BiPAP may be better tolerated because it allows for easier expiration against positive pressure (Chowdhuri, Otolaryngol Clin North Am 2007; 40(4): 807-827).

**(11)**

Sleep apnea is a condition in which a patient's breathing nearly or completely stops for periods of 10 seconds or more during sleep. It is estimated to affect 2% to 4% of adults 30 to 60 years of age (Norman and Loredo, Clin Geriatr Med 2008; 24(1): 151-165, ix; Patil et al., Chest 2007; 132(1): 325-337). There are several types of sleep apnea:

- Obstructive (upper respiratory airflow blockage during sleep)
- Hypopnea (decreased depth and rate of respiration during sleep)
- Central (no respiratory effort made during sleep in the absence of obstruction)
- Mixed (any combination of the above)
- Complex (central apnea associated with CO2 regulation and obstructive airway disease)

Obstructive sleep apnea (OSA) may be treated with positive airway pressure, surgery (e.g., UPPP), or with the use of oral or dental appliances. Untreated OSA has been associated with an increase in the risk of stroke or death from any cause (Ahmed et al., Chest 2007; 132(5): 1672-1677). Central apnea is generally treated with medications (e.g., acetazolamide, TCAs) or with positive airway pressure.

**(12)**

Adherence refers to continued patient use of the equipment as prescribed by the physician. Patient noncompliance with noninvasive positive pressure therapy is very high but may be improved by patient education, proper fitting of the face or nasal mask, physician follow-up, and by attending support group meetings. Objective data regarding patient adherence may be obtained by downloading the device's internal records or by monitoring the hour meter recorder (Chowdhuri, Otolaryngol Clin North Am 2007; 40(4): 807-827).

**(13)**

PSG should be performed on patients treated with CPAP or BiPAP to monitor the therapeutic effects when a change in pressure is made. Patients who gain or lose significant weight (i.e., 10% body weight) may require a change in their CPAP settings in order to maintain a patent airway during sleep (Kushida et al., Sleep 2005; 28(4): 499-521).

**(14)-DEF:**

UPPP is the excision of the uvula and partial excision of soft tissue of the palate and lateral pharyngeal walls.

**(15)-DEF:**

UPPP is a surgical procedure aimed at reducing obstruction and thereby enlarging the airway in an attempt to alleviate OSA. There are several other surgical procedures, such as laser-assisted uvulopalatoplasty (LAUP), that have not been proven to be effective for mild to moderate symptoms of sleep apnea (Sundaram et al., Cochrane Database Syst Rev 2005; (4): CD001004).

**(16)-DEF:**

There are two types of dental appliances used to treat OSA; a tongue retaining device (TRD) holds the tongue forward to keep the airway open while a mandibular advancement device (MAD) uses the teeth and device positioning to pull the mandible forward to keep the airway open.

**(17)**

Symptoms may recur after an initial positive response to surgery or an oral appliance; repeat PSG should be performed to determine if additional measures need to be instituted (Kushida et al., Sleep 2005; 28(4): 499-521).